PATENT RCA 89,550

#17 BA5/20/ay

### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

pplicants

S. KLOPFENSTEIN ET AL.

Serial No.

09/505,588

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For

A SYSTEM FOR ACQUIRING AND PROCESSING

BROADCAST PROGRAMS AND PROGRAM GUIDE

DATA

Examiner

S. BELIVEAU

Art Unit

2614

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MAY 1 7 2004

**Technology Center 2600** 

# CORRECTED APPEAL BRIEF FILED UNDER 37 C.F.R 1.192(c) and 37 C.F.R. 1.192(d)

May It Please The Honorable Board:

Sir:

The Applicants appeal the final rejection of Claims 1 to 23 of the above-identified application in the Final Rejection mailed March 17, 2003. This brief corrects the deficiencies of the Appeal Brief mailed on November 17, 2003, as noted in the Notice of Non-Compliance mailed on February 9, 2004. Please charge any fees owed in connection with the filing of this corrected appeal Brief to Deposit Account No. 07-0832.

Three copies of the Brief are enclosed. This page is also submitted in duplicate for fee charging purposes.

Applicants do not request an oral hearing.

Certificate of Mailing Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, Alexandria, VA 22313-1450 on May 9, 2004

Joel Fogelson

### REAL PARTY IN INTEREST

The real party in interest, the Assignee, is:

Thomson Licensing S.A., 46 quai Alphonse Le Gallo, 92648 Boulogne-Billancourt France

### RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

#### STATUS OF THE CLAIMS

Claims 1 to 23 are rejected.

Claims 1 to 23, all the rejected claims, are appealed.

### STATUS OF AMENDMENTS

All amendments were entered and are reflected in the Claims included in the Appendix.

#### SUMMARY OF THE INVENTION

The invention concerns a method for a video decoder of assigning a program guide type to a broadcast channel. The method selects a program guide type from a plurality of different program guide types and associates the selected program guide type to a broadcast channel. The association is stored in a database in the video decoder. The video decoder then acquires program guide information of the selected program guide type.

#### ISSUES

- #1. Whether the subject matter of Claims 1-6 and 10-11 is unpatentable under 35 U.S.C. §103(a) over Newberry et al. (U.S. Patent #5,625,406, hereafter referred to as 'Newberry').
- #2. Whether the subject matter of Claims 12-17 is unpatentable under 35 U.S.C. §103(a) over Newberry et al. (U.S. Patent # 5,625,406, hereafter referred to as 'Newberry').
- #3. Whether the subject matter of Claims 12-17 is unpatentable under 35 U.S.C. §103(a) over Newberry in view of Kim et al. (U.S. Patent #6,405,372, hereafter referred to as 'Kim').
- #4. Whether the subject matter of Claims 18-19 is unpatentable under 35 U.S.C. §103(a) over Newberry in view of Kim et al. (U.S. Patent #6,405,372, hereafter referred to as 'Kim').

#5. Whether the subject matter of Claims 7-9 is unpatentable under 35 U.S.C. §103(a) over Newberry in view of Schneidewend et al. (U.S. Patent # 6,249,320, hereafter referred to as 'Schneidewend').

#6. Whether the subject matter of Claims 20-22 is unpatentable under 35 U.S.C. §103(a) over Newberry in view of Rzeszewski et al. (U.S. Patent # 5,699,125, hereafter referred to as 'Rzeszewski').

#7. Whether the subject matter of Claim 23 is unpatentable under 35 U.S.C. §103(a) over Newberry in view of Rzeszewski, and in further view of Lanyon et al. (European Patent # 0,849,947, hereafter referred to as Lanyon).

#### **GROUPING OF THE CLAIMS**

For each ground of rejection which Appellant contests herein that applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand or fall together.

### **ARGUMENTS**

#1. 35 U.S.C.§ 103(a) Rejection of Claims 1 to 6, and 10 to 11 in view of Newberry

Reversal of the Final Rejection ("hereinafter termed rejection") of Claims 1 to 6 and 10 to 11 under 35 U.S.C. §103(a) over Newberry is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references.

A. In accordance with Applicants' invention, a video decoder utilizes a method for acquiring program guide information conveyed on one of a plurality of broadcast channels. Claim 1 claims a method including the steps of selecting a program guide type from a plurality of program types and "associating a program guide of said selected program type with a broadcast channel by updating a database in said video decoder," (emphasis added). A program guide of the selected program type is then acquired, according to the claimed steps of Claim 1.

The Examiner states in the rejection that Newberry discloses the steps of selecting a program guide type from a plurality of different program types and, "to 'associate' the 'program guide' with a 'broadcast channel' wherein a user may utilize the unified 'program guide' to tune or retrieve a broadcast channel (Col. 5, lines 57-65). The Applicants disagree

with the Examiner's use of Newberry, as the reference does not disclose nor suggest the step of "associating a program guide of said selected program type with a broadcast channel" as claimed in Claim 1.

Specifically, Newberry discloses an operation of creating a unified program guide, wherein the sources of the program guide information may be a digital video signal, analog video signal, and an informational signal. Several different scenarios are presented for selecting a priority of what sources should be used for creating such a program guide. For example, one scenario presents the digital video signal as the preferred first choice, the analog video signal being the second source, and the information signal being the third choice (Newberry, col. 4, lines 53-64). In these presented scenarios, Newberry does not associate "a program guide of said selected program guide type with a broadcast channel" as claimed in Claim 1. Newberry teaches that different sources of data may be used to form a unified program guide; not the operation of associating a program guide with a broadcast channel claimed in Claim 1.

B. Moreover, Newberry presents a system that forms a unified programming guide from different signal sources as digital, analog, and information signals. When the programming guide is collated, the system of Newberry assumes that the information signals the characteristics that, "these different input signals, any or all of which can carry the <u>same program or channel guide information</u>," (Newberry, column 3, lines 44-48, emphasis added), where the type of programming guide is not considered. Newberry only concerns itself with the input signal sources (Newberry, column 3, lines 25-43, column 4, lines 55-64), as Newberry assumes that the signal sources carry the same information; not that different program guides may be available with different types of information and such differences make such program guides relevant.

In response to the Applicants' statements, the Examiner states in the rejection that the section cited by the Applicants using the "any or all of which" phrase, "does not preclude the examiner's position that the information carried over the aforementioned signals is different. Rather, as is notoriously well known in the art, the program offerings carried by a hybrid system from the same or multiple sources do not necessarily overlap", (rejection, page 3, lines 1-5). The Examiner then cites to Morrison (U.S. Patent # 6,359,580) column 1. Lines 52-64 to support this point.

Applicants note that this section of Morrison does not refer to different types of program guides. Specifically, the reference discloses that with the advent of digital television; Digital Satellite Systems (DSS), high definition television (HDTV), and digital cable may each have different numerical ranges for channels to be selected by a user. Hence, as disclosed by Morrison, "how are viewers to know which source they are receiving if the channel number is 105. Channel 105 can be from any one of the three sources identified above." Morrison provides a solution where a user may specify a specific signal source for a channel if a conflict arises when such a channel is selected (see Morrison, col. 2, lines 5-18). Morrison is not related to the creation of a unified program guide from different sources, as taught in Newberry. That is, Morrison does not elucidate how different program guides are assimilated by the teachings of Newberry. Morrison only teaches that different sources may have different channel ranges, a problem that Newberry does not address or suggest.

C. As for updating a database, the Applicants remark that Newberry does not "associate a program guide of said selected program guide with a broadcast channel," as recited in Claim 1. Therefore, to use a database to store such an association, in the manner suggested by the Examiner, requires hindsight application of the teachings of the Applicants' invention.

For the reasons given above, Claim 1 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicants request that the rejection of these Claims be withdrawn. Rejected dependent Claims 2-5 and 10-11 are considered patentable for substantially the same reasons given above for Claim 1. Applicants request that the Examiner withdraw the rejection to these Claims.

### #2. 35 U.S.C.§ 103(a) Rejection of Claims 12 to 17 over Newberry

Reversal of the rejection Claims 12-17 under 35 U.S.C. §103(a) over Newberry is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references.

A. Claim 12 claims the step of "scanning through received broadcast channels to identify program guides available on individual channels". The Examiner states in the rejection that such a step, "would

have been obvious to one of the ordinary skill in the art to employ for the purposes of locating available "program guides". Applicants disagree with the Examiner's assertion.

As previously stated in connection with Claim 1, Newberry is directed towards prioritizing what source of program guide information is used to produce a unified programming guide. Newberry does not need to scan broadcast channels, as suggested by the Examiner, in order to determine what program guides are available, as claimed in Claim 12. Newberry already describes a predefined system in terms of what sources to use (analog, digital, or information signal) when the disclosed system is used to create a unified program guide (Newberry, page 4, lines 53-65). Such a system would not benefit from recognizing what program guides are available by "scanning through received broadcast channels to identify programs guides available of individual channels", as suggested by the Examiner, without the teachings of the present invention. Hence, nothing in Newberry suggests that it should be combined with the scanning operation suggested by the Examiner.

Examiner in response to the Applicants' argument states that the scanning limitation in the Claim, "however, is such that it need only require the 'identification program guides available on individual channels," (Rejection, page 3, lines 14-16). Moreover, the Examiner continues with the statement that Newberry teaches that "analog video signals are 'associated with' analog program guides," and "digital video signals 'associated with' digital program guides," (Rejection, page 3, lines 16-18).

The associations referenced by the Examiner however do not disclose or suggest how to identify different program guides conveyed on an individual broadcast channel that may either be analog or digital. Specifically, in the case of digital channels, multiple guides may be conveyed such as PSIP and MPEG PSI guides (specification, page 8, lines 15-18). Newberry with the Examiner's modification does not disclose or suggest what to do in the situation where one digital channel uses a PSIP based guide and a second digital channel uses a PSI guide. Hence, the identification step is not as simple as recognizing that analog signals are associated with analog program guides and that digital signals are associated with digital program guides as asserted by the Examiner.

For the reasons given above, Claim 12 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicants request that the rejection of these Claims be withdrawn. Rejected dependent Claims 13-17 are considered patentable for substantially the same reasons given above for

Claim 1. Applicants request that the Examiner withdraw the rejection to these Claims.

# #3. 35 U.S.C.§ 103(a) Rejection of Claims 12-17 over Newberry in view of Kim

Reversal of the rejection Claims 12-17 under 35 U.S.C. §103(a) over Newberry in view of Kim is respectfully requested. Specifically, these Claims are patentable for the reasons given above in section 2 of this Brief regarding the Newberry reference for these rejected Claims. Applicants request that the Examiner withdraw the rejection to these Claims.

## #4. 35 U.S.C.§ 103(a) Rejection of Claims 18-19 over Newberry in view of Kim

Reversal of the Rejection Claims 18-19 under 35 U.S.C. §103(a) over Newberry in view of Kim is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references.

Claim 18 claims a step of "selecting a program guide of a specific type conveyed on a said individual broadcast channel". Neither Newberry nor Kim, alone or in combination, disclose or suggest this step.

As cited above in sections 1 and 2, digital channels may exist with either a PSIP or a MPEG based PSI program guide type. The section cited to by the Examiner in Newberry in the Rejection (Newberry, Col. 4, lines 49-69 and Col. 5, lines 1-8) does not disclose or suggest how to distinguish between different program guide types for either an analog or digital channel. Moreover, the Kim reference in combination with Newberry does not even concern itself with of multiple program guide types. Kim only discloses that, "it is very probably that each TV broadcast station transmits its own EPG," but the types of programming guides used for each channel is not address in the reference, unlike the invention claimed in Claim 18.

In addition, Applicants assert that the Examiner's recited modifications of Newberry with the teachings of Kim are a burdensome modification. Specifically, the system of Newberry uses one tuner (12) to obtain electronic programming guide information from an analog, digital, or information source to create a unified programming guide. The priority in which such sources are consulted for program guide is explained in Newberry at col. 4 lines 53-65.

In contrast, Kim is directed towards the use of two tuners (100, 108) where one tuner is used to obtain electronic programming guide information while the other tuner is used to view a channel. The addition of a second tuner to the system of Newberry would render unsatisfactorily Newberry for its intended purpose, as the second tuner would unduly complicate the operation of the disclosed. Moreover, nothing in Newberry suggests the need for a second tuner as the system of Newberry already suggests a logic and priority for selecting a source for obtaining electronic programming guide information (Newberry, col. 4, lines 53-65), without combining Newberry with Kim in the manner suggested by the Examiner.

For the reasons given above, Claim 18 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicants request that the rejection of these Claims be withdrawn. Rejected dependent Claim 19 is considered patentable for substantially the same reasons given above for Claim 18. Applicants request that the Examiner withdraw the rejection to these Claims.

## #5. 35 U.S.C.§ 103(a) Rejection of Claims 7-9 over Newberry in view of Schneidewend

Reversal of the rejection Claims 7-9 under 35 U.S.C. §103(a) over Newberry in view of Schneidewend is respectfully requested. Rejected dependent Claims 7-9 are considered patentable for substantially the same reasons given above for independent Claim 1. Applicants request that the Examiner withdraw the rejection to these Claims.

## #6. 35 U.S.C.\s 103(a) Rejection of Claims 20-22 in over Newberry in view of Rzeszewski

Reversal of the rejection of Claims 20-22 under 35 U.S.C. §103(a) over Newberry in view of Rzeszewski is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references.

The Examiner in the Office Action combines the EPG storage techniques of Newberry with the memory reduction techniques of Rzeszewski to arrive at the features of Claim 20. Specifically, the Examiner states that Rzeszewski determines, "if the automatically or manually tuned channel has a 'program guide associated 'with it," (Rejection, page 14, lines 11-13).

Applicants disagree. Rzeszewski discloses the determination of whether a tuned to frequency is "among the programmed subset of the predetermined frequency channels." Then Rzeszewski discloses the update of "database information" if the data in memory is current, using data in a second memory bank.

In contrast, the claimed method of Claim 20 determines "from a decoder database if a program guide is associated with an individual channel"; neither Newberry nor Rzeszewski have such an association available (see arguments listed above). Furthermore, Claim 20 examines data received on an individual broadcast channel to determine if a program guide availability "to an absence of a program guide associated with said individual broadcast channel." This feature of Claim 20 is performed if the association of a program guide to an individual broadcast channel is absent. Rzeszewski, in contrast, always performs a check if information in a database is "current" for a frequency on a predetermined frequency channel list. These two systems have different criteria and operations for checking and updating a database. The features claimed in Claim 20 are not suggested or disclosed in either Rzeszewski or Newberry, alone and in combination.

In addition, Applicants submit that the addition of the two tuners from Rzeszewski with the system of Newberry would present the same problems for Claim 20 as indicated above in connection with Claim 12 when combining with the system of Newberry with Kim.

For the reasons given above, Claim 20 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicants request that the rejection of this Claim be withdrawn. Rejected dependent Claims 21 and 22 are considered patentable for substantially the same reasons given above for Claim 20. Applicants request that the Examiner withdraw the rejection to these Claims.

# #7. 35 U.S.C.§ 103(a) Rejection of Claims 23 in over Newberry in view of Rzeszewski, and in further view of Lanyon

Claim 23 is further rejected under 35 U.S.C. §103(a) over Newberry in view of Rzeszewski and in further view of Lanyon. Reversal of this rejection is requested. The rejection makes the following crucial errors in interpreting the cited references.

Specifically, the Examiner states in the rejection that it would obvious to use the teachings of Lanyon, "to one of the ordinary skill in the art to at the time of the invention to use a 'determined command signal' such as a 'add' command to trigger the storage of 'program guide' information," (Rejection, page 15, lines 12-14). Applicants disagree with the Examiner's assertion.

The section of Lanyon referred to by the Examiner does not refer to an action as to "a user request to add a broadcast channel to a set of viewable channels", as claimed in Claim 23. That is, Lanyon refers to an operation of initializing of logic flow, as shown in Fig. 2 of Lanyon, supporting the functions of, "search and storing on the teletext pages information relative to the programming of television transmissions," (Lanyon, col. 8, lines 8-11). This is not an operation of "a user request to add a broadcast channel to a set of viewable channel" as claimed in Claim 23.

For the reasons given above, Claim 23 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicants request that the rejection of this Claim be withdrawn.

Accordingly, the Applicants submit that the application is in condition for allowance.

Respectfully submitted,

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## <u>APPENDIX</u> CLAIMS ON APPEAL

1. In a video decoder, a system for acquiring program guide information conveyed on one of a plurality of broadcast channels, comprising the steps of:

selecting a program guide type from a plurality of different types of program guide;

associating a program guide of said selected program guide type with a broadcast channel by updating a database in said video decoder; and

acquiring a program guide of said selected program guide type.

- 2. A system according to claim 1, including the step of capturing packetized program information comprising a program conveyed on said broadcast channel using said acquired program guide.
- 3. A system according to claim 1, including the step of displaying a list of available programs and broadcast display times using information derived from said acquired program guide.
- 4. A system according to claim 1, wherein said different types of program guide comprise at least one of (a) program specific information, and (b) information contained in a vertical blanking interval of an analog type video signal.
- 5. A system according to claim 4, wherein said program specific information includes at least one of (i) information in ATSC compatible program specific information protocol (PSIP) format and (ii) information in MPEG compatible program specific information (PSI) format.

- 6. A system according to claim 4, wherein said program specific information includes at least one of (a) program map information including data for identifying individual packetized datastreams that constitute a program, (b) program association information for associating a program with data for identifying packets comprising associated program map information, (c) network information for defining network parameters, (d) channel map information associating channel identification numbers with one or more of, a carrier frequency, transport stream identifier, service type and program number and (e) conditional access information for use in accessing programs that are dependent upon user entitlement.
- 7. A system according to claim 1, wherein said broadcast channel comprises a physical transmission channel (PTC).
- 8. A system according to claim 1, wherein said acquired program guide,

links a transmission channel to a broadcast channel identification number associated with an information provider and a group of sub-channels, and

links a sub-channel from among said group of sub-channels with a second identification number.

9. A system according to claim 8, wherein

said associating step associates said selected program guide with a transmission channel;

said acquiring step acquires a program guide for use in capturing a program conveyed on a broadcast sub-channel; and

said capturing step captures packetized program information comprising a program conveyed on said broadcast sub-channel.

10. A system according to claim 1, including the step of automatically scanning through received broadcast channels and identifying and acquiring an available program guide for individual channels.

11. A system according to claim 1, including the step of automatically scanning through received channels and identifying and acquiring a plurality of program guides for an individual channel, wherein data from at least one program guide of said plurality of acquired program guides is used to update said acquired program guide of the selected program guide type.

12. In a video decoder, a system for acquiring packetized program information comprising a program conveyed on one of a plurality of broadcast channels, comprising the steps of:

scanning through received broadcast channels to identify program guides available on individual channels;

selecting an identified program guide conveyed on an individual broadcast channel;

acquiring said selected program guide, wherein said selected program guide is associated with said individual broadcast channel; and

capturing packetized program information comprising a program conveyed on said individual broadcast channel using said acquired program guide.

13. A system according to claim 12, including the step of automatically examining data received on an individual broadcast channel to identify available program guides of different type;

acquiring a program guide of a different type; and

using data from said program guide of a different type to update said selected program guide associated with said individual broadcast channel.

### 14. A system according to claim 13, wherein

said program guides of different type includes guides comprising two or more of (a) information in ATSC compatible program specific information protocol (PSIP) format and (b) information in MPEG compatible program specific information (PSI) format, and (c) information contained in a vertical blanking interval of an analog type video signal.

- 15. A system according to claim 12, including the step of examining data received on an individual broadcast channel to identify available program guides of different type wherein said data is examined to identify program guides of particular type in a predetermined order.
- 16. A system according to claim 15, wherein said data is examined to identify firstly a digitally coded program guide and then an analog video data program guide.
- 17. A system according to claim 12, including the step of associating a selected program guide with a corresponding individual broadcast channel of said received broadcast channels for identification and use of said associated selected program guide in acquiring said individual broadcast channel.
- 18. In a video decoder, a system for acquiring packetized program information comprising a program conveyed on one of a plurality of broadcast channels, comprising the steps of:

tuning to receive an individual broadcast channel of said plurality of broadcast channels;

examining data received on said individual broadcast channel to determine program guide availability;

selecting an available program guide of a specific type conveyed on said individual broadcast channel;

acquiring said selected program guide, wherein said program guide is associated with said individual broadcast channel; and

capturing packetized program information comprising a program conveyed on said individual broadcast channel using said acquired program guide.

19. A system according to claim 18, wherein in said examining step includes the step of examining data received on said individual broadcast channel to identify available program guides of different type.

20. In a video decoder, a system for acquiring program guide information on one of a plurality of broadcast channels, comprising the steps of:

determining from a decoder database if a program guide is associated with an individual broadcast channel, in response to a user channel change command;

examining data received on said individual broadcast channel to determine program guide availability in response to an absence of a program guide being associated with said individual broadcast channel; and

acquiring an available program guide.

- 21. A system according to claim 20, including the step of capturing packetized program information comprising a program conveyed on said individual broadcast channel using said acquired program guide.
- 22. A system according to claim 20, including the step of examining data received on said individual broadcast channel to identify program guide type.
- 23. A system according to claim 20, wherein said step of determining from a decoder database if a program guide is associated with an individual broadcast channel is performed in response to a user request to add a broadcast channel to a set of viewable channels.